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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/446,373 07/11/00 CALL

H 21373.003

EXAMINER

HM22/0828

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ART UNIT

PAPER NUMBER

1651

DATE MAILED:

08/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

09/446,373

Applicant(s)

CALL, HANS-PETER

Examiner

Harry J Guttman

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 50-100 is/are pending in the application.
- 4a) Of the above claim(s) 88-99 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 50-87 and 100 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Status of the Application*

The **Office Action mailed July 20, 2001 is vacated** for the following reasons:

The examined claims (1-30) were, in fact, cancelled in a preliminary amendment, filed July 11, 2000. However, the amendment filed July 11, 2000 was not entered into the application until August 2, 2001, after Office Action was mailed.

It is noted that the Election by applicant in paper number 9 (June 13, 2001) stands because the groups with claims 50-100 are the same as those from claims 1-49, and the groups are drawn to the same inventions. The pending claims correspond to the groups as follows:

Group I: claims 50-87 and 100.

Group II: claims 80, 88 and 100.

Group III: claims 80, 89 and 100.

Group IV: claims 80, 90-93 and 100.

Group V: claims 80, 94, 95 and 100.

Group VI: claims 80, 96 and 100.

Group VII: claims 80, 97-100.

It is noted there are no equivalent claims to those of claims 80 and 100 in the canceled set of claims (i.e., 1-49).

It is noted that claims 80 and 100 appear to be duplicates.

***Status of the Claims***

Claims 50-100 are pending.

***Election/Restrictions***

Applicant's election with traverse of Group I in Paper No. 9 is acknowledged. The traversal is on the ground(s) that (1) there is a single general inventive concept linking the inventions and (2) a search of one group would necessarily entail a search of the others posing no burden for search of the additional groups. This is not found persuasive because as clearly stated in MPEP Annex B section (e) page AI-37, Unity of Invention extends only to a single independently claimed method of use from an independently claimed product. While burden to search is not a consideration in a national stage entry of a PCT, generally, an overlapping search is not a coextensive search and burden in examining materially different groups having materially different issues also exists.

The requirement is still deemed proper and is therefore made FINAL.

Claims 50-87 and 100 are examined on their merits insofar as they are examinable.

Claims 80 and 100 are examined insofar as they read on the elected invention.

***Priority***

It is requested that the first line of the first page of the specification indicate that the instant application is a 371 of the earlier filed PCT application, as follows.

This application is a 371 of PCT/DE98/01689, filed June 19, 1998, which claims priority to German application Serial No.197 26 323.2, filed June 20, 1997.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
The residence and Post Office Address are not legible.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 50-87 and 100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Generally, **the claims are replete with indefinite claim language.** Applicant is urged to carefully modify the claims to conform to legal claim language.

The preamble of claim 50 (and many of its dependents) uses the phrase "component system". It is unclear if this system is in the same solution or consists of solutions in separate containers. Clarification is required.

Claims 50, 60, 64, 70-72, 74, 75, 90-87 and 100 use "and/or" in a markush group; this is improper markush language. One example of correct markush language begins with "is selected from the group consisting of", which is followed by the list of elements, and ends with a single "and" just before the last element in the list. Also there is a comma missing between "3.1.3" and "3.1.4". Correction is required.

In claims 50, 53, 54, 58-60, 63, 65-75, 77, 79-85 and 100 the phrases "preferably", "such as" or "for example" render the claims indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Correction is required.

Claims 53, 54, 84 and 86 recite "and other sources" or "and others". These claims are indefinite because it is not clear to what sources this refers. Correction is required.

Claim 50 step c) states an "oxidant precursor for reaction with the enzymes". It is unclear how the enzymes of step a) (which are not oxidases) could react with an oxidant precursor. Clarification is required.

Claim 50 step d) states a "ketone from the group of carbonyl compounds". It is unclear what this means, since all ketones are from the group of carbonyl compounds. Clarification is required.

Claims 51-79 uses the phrase "characterized in that". This is indefinite because it is unclear if the claim refers to properties of the object or the actual object itself. Correction is required.

Claims 53 and 75 should italicize the microorganism names. Correction is required.

Claims 80-87 and 100 provide for the use of the composition of claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 80-87 and 100 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App.

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1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim 55 lacks antecedent basis because it is broader than its parents.

Correction is required.

Claim 56 lack antecedent basis because it recites modified enzymes, enzyme constituents etc... These were not described in the parent claims. Correction is required.

Several claims use the extension "etc" (e.g., claims 59, 84 and 85). This is improper since this phrase does not clearly set the metes and bounds of the claim. Correction is required.

Several claims use the phrase "it is possible" (e.g., claims 70 and 71). This is improper since the phrase does not clearly set the metes and bounds of the claim. Correction is required.

Claims 56 and 76 cite "catalysts". It is not understood to what this refers, and, as such, this claim is not considered further *for prior art purposes*



Claim 64 adds a limitation to the composition by altering the applied pressure. Since this does not alter the composition, it is improper. Correction is required.

Claims 62, 67, 67-75, 77-79 and 86 add additional components to claim 50. This is improper because claim 50 cites the four component system in closed language (i.e., "consisting of"). These claims therefore lack antecedent basis.

Claims 84 and 85 lack antecedent basis because they include post-processing steps.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 50, 51, 53-55 and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by Baillely et al. (WO 96/06148). Baillely et al. (WO 96/06148) disclose a

detergent composition containing lipase from *Pseudomonas sp.* (page 5) and amylases (page 21-22), a number of fatty acids (pages 9, 10 and 28), bleaching precursors including NOBS and TAED (pages 37-39), and ketones present in the polymeric dispersing agents (page 31).

Claims 50, 51, 53-55 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Gordon et al. (US5719112). Gordon et al. (US5719112) disclose a dishwashing composition containing lipase from *Pseudomonas sp.* and amylases (column 1 lines 50-68 and column 6 lines 20-39), ketones and fatty acids as foam depressors (column 6 lines 1-5), and bleach agents/activators including TAED and SNOBS (column 5 lines 25-40).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50-55, 57-65, 67-75 and 77-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baillely et al. (WO 96/06148) and Gordon et al. (US5719112) in view of Damhus et al. (WO 90/00188), Damodaran et al. (US 5976859) and Margolin et al. (US 6140475).

The disclosures of Baillely et al. (WO 96/06148) and Gordon et al. (US5719112) are given above. Neither reference disclose the use of amidase or nitrilase enzyme as enzymes for use in detergents.

Damhus et al. (WO 90/00188) disclose a detergent comprising an amidase (page 2 lines 1-13), oxidant precursors (page 2 lines 22-28), a fatty acid, and lipases (page 3).

Damodaran et al. (US 5976859) disclose a detergent comprising protease Q (an amidase) (column 6 lines 25-32), lipases (column 7 lines 1-3), foam regulators, and bleaching precursors (column 7 lines 6-16).

Margolin et al. (US 6140475) disclose the use of nitrilase and lipases in a detergent composition (column 6 lines 42-60).

Thus, one of ordinary skill in the art would have been motivated to substitute the nitrilase or amidase enzyme for lipase in the claimed detergent/bleaching solution because nitrilase and amidase were known, at the time the invention was made, for their use in detergent and bleaching solutions.

It is well known that it is *prima facie* obvious to combine two or more ingredients each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. The idea for combining them flows logically from their having been used individually in the prior art. *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Sussman*, 1943 C.D. 518; *In re Susi*, 58 CCPA 1074, 1079-1080; 440 F.2d 442, 445; 169 USPQ 423, 426 (1971); *In re Crockett*, 47 CCPA 1018, 1020-1021; 279 F.2d 274, 276-277; 126 USPQ 186, 188 (1960).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Claims 50-55, 57-75, 77-87 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaaret (US 5478356) in view of Lee et al. (WO 92/13993) and Francis et al. (WO 94/18386).

Kaaret (US 5478356) discloses compositions to be used in wood pulp bleaching (column 3 lines 50-55). Kaaret discloses the combination of sodium peroxide and oxidant precursors (column 8 lines 50-61), metal sequestering agents including EDTA and STPP (column 9 lines 7-20), lipases and proteases (column 9 lines 35-50), lauric acid (column 11 line 66), and ketones and nitrilamines (column 4 lines 1-67). These compositions are to be used at a pH of greater than 7.5.

Kaaret does not disclose the exact conditions and concentrations of the components described in claims 80-87 and 100.

Lee et al (WO 92/13993) discloses the combination of ketone at greater than 4% (page 4), oxygen donors (0.9%) (page 4, example 1), chelating agents (e.g., EDTA) at 0.1-3.0% (page 5), the solution is to be at a pH of 6-14 and with a pulp consistency of ~3-35%. The incubation temperatures and times, and component concentrations were varied over wide ranges and encompassed the claimed conditions (see examples 1-47).

Francis et al. (WO 94/18386) discloses the use of ketones to aid in delignification (page 7).

Thus, one of ordinary skill in the art would have been motivated to optimize the conditions and exact concentrations to give the expected result of optimizing delignification and bleaching of wood pulp.

Further, it is well known that it is *prima facie* obvious to combine two or more ingredients each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. The idea for combining them flows logically from their having been used individually in the prior art. *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Sussman*, 1943 C.D. 518; *In re Susi*, 58 CCPA 1074, 1079-1080; 440 F.2d 442, 445; 169 USPQ 423, 426 (1971); *In re Crockett*, 47 CCPA 1018, 1020-1021; 279 F.2d 274, 276-277; 126 USPQ 186, 188 (1960).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Additional references not cited in this action have been listed in PTO-892 to establish the state of the art.

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The period of response was reset to expire 3 months from the date of mailing of this Office Action. Copies of the PTO-1449, PTO-892 and relied upon art were provided with the Office Action mailed 20 July 2001.

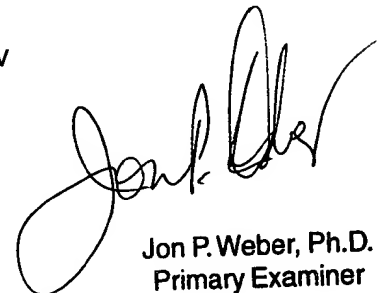
Any inquiry concerning this communication should be directed to Harry J. Guttman, Ph.D. at telephone number (703) 305-0159. The examiner can normally be reached during the hours of 07:30 to 16:00 Eastern Time, Mon.-Thurs. If attempts to reach the examiner by telephone are unsuccessful, a message may be left on the voice mail. The fax number for Art Unit 1651 is (703) 308-4242 or 305-3014. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196. My supervisor, Michael Wityshyn, may be contacted at (703) 308-4743.

All internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified or exchanged unless there is of record an express waiver of the confidentiality requirements of 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published in the Patent and Trademark Office Official Gazette on 25 February 1997 at 1195 OG 89.

H.J.G. 20 August 2001



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